MARGARET T. GLASSCOE

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Margaret Glasscoe is a Member of the Technical Staff in the Solid Earth Group at the Jet Propulsion Laboratory, California Institute of Technology. She is completing her PhD on the topic of numerical simulations of fault interactions at the University of California, Davis. She has experience working with a number of modeling codes, including viscoelastic finite element models (the JPL developed Geophysical Finite Element Simulation Tool, GeoFEST, in particular). Her research includes modeling deformation of the Earth's crust to study postseismic response to large earthquakes, numerical models of the rheological behavior of the lower crust, and simulations of interacting fault systems.

Education

Ph.D. candidate, Geology, University of California, Davis, *emphasis in geophysics; ancillary fields of study: numerical methods and mechanics* (anticipated degree completion June 2008)
M.S., Geology, University of California, Davis (2003)
B.S., Geological Sciences, University of Southern California, *Magna Cum Laude* (1997)
B.A., Print Journalism, University of Southern California, *Magna Cum Laude* (1997)

Professional Experience

Jet Propulsion Laboratory
- Member of the Technical Staff, Solid Earth Group, 2004-present
- Member of the Technical Staff, Data Understanding Systems Group, 2000-2004
- Research Assistant, Satellite Geodesy and Geodynamics Systems Group, 1996-2000

University of California, Davis, Department of Geology
- Teaching Assistant, Winter, Summer 1999, Summer 2000, Summer 2002, Fall 2002-Fall 2003
- Research Assistant, Fall 1998, Spring 1999-2002

University of Southern California, Department of Earth Sciences
- Teaching Assistant, 1997-1998
- Research Assistant, 1997
- Laboratory Assistant, 1994-1996

Awards

JPL Outstanding Accomplishment Award: InSAR Workshop Report, 2006
JPL Team Bonus Award: QuakeSim Parallel GeoFEST Development Team, 2004
NASA Graduate Student Research Program Fellowship, 1999-2000, 2000-2001, 2001-2002
Sigma Xi Grants in aid of Research Award, June 2000
NSF Graduate Research Fellowship Honorable Mention, 1998
Southern California Earthquake Center Community Outreach Award (Education), 1998
JPL Notable Organizational Value Added (NOVA) Award, 1997, 1998

Publications

Donnellan, A., Rundle, J., Fox, G., McLeod, D., Grant, L., Tullis, T., Pierce, M., Parker, J., Lyzenga, G., Granat, R., and **Glasscoe, M.**, 2005, QuakeSim and the Solid Earth Research Virtual Observatory, Pure and Applied Geophysics, v. 163, pp. 2263-2279.

Donnellan, A., Glasscoe, M., and Zebker, H., 2005, Community InSAR Workshop calls for robust program and dedicated satellite mission, EOS Transactions AGU, v. 86, n. 8, p. 79.

Glasscoe, M.T., Donnellan, A., Kellogg, L.H., and Lyzenga, G.A., 2004, Evidence of strain partitioning between the Sierra Madre fault and the Los Angeles Basin, southern California from numerical models, Pure and Applied Geophysics, v. 161, pp. 2343-2357.

Parker, J., Lyzenga, G., Norton, C., Zuffada, C., **Glasscoe, M.**, Lou, J., and Donnellan, A., Geophysical Finitie Element Simulation tool (GeoFEST): algorithms and validation for quasistatic regional faulted crust problems, Pure and Applied Geophysics (in press).

Turcotte, D.L. and **Glasscoe, M.T.**, 2004, A damage model for the continuum rheology of the upper continental crust, Tectonophysics, 383, 71-80.